

REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-8 and 16-17 are presently active in this case. The present Amendment amends Claims 1-8 and 16-17 without introducing any new matter or raising new issues; and cancels Claims 9-11 without prejudice or disclaimer.

The outstanding Office Action objected to the specification and claims because of informalities. Claims 1-11 and 16-17 were rejected under 35 U.S.C. §112, second paragraph, as indefinite. Claims 9-11 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement.

In order to correct minor formal issues in the Abstract of the Disclosure, the Abstract of the Disclosure is rewritten to be in accordance with the amendments to independent Claim 1 and to delete the title “Video Processing” and the passage “Figure 10.” In light of their formal nature, the changes to the specification and Abstract do not raise a question of new matter.

To clarify Applicants’ invention and to better comply with U.S. claim drafting practice, Claims 1-8 and 16-17 are amended. Since the amendments are merely formal in nature, they are not believed to raise a question of new matter or raise new issues, since the scope of the claims are kept unchanged.

In response to the rejection of Applicants’ Claim 1 under 35 U.S.C. §112, second paragraph, as conveying a different method than the one being conveyed by Applicants’ Specification, Applicants respectfully traverse the rejection and request reconsideration of the rejection, as next discussed.

Briefly summarizing, Applicants’ invention as recited in Claim 1, relates to a video processing method for *preparing* an anti-aliased foreground image for display over an image

background, said method comprising, *inter alia*: first processing the primitive-processed image signals to superpose the primitive-processed image over the image background; and second processing the original foreground image signals to superpose the original foreground image over the primitive-processed image.

In a non-limiting example as described in Applicants' specification, the superposing of the primitive-processed image over the image background is next explained. The primitive-processed image (foreground)¹ is placed over a background image (background).² When performing a superposition of the images, the foreground or background can be superposed by using the z-axis value of each pixel can be used to determine which pixel is on top.³

If an alpha blending is performed, and any superposition of foreground over background is calculated, the alpha value can be in a range from 0 to 1. If the alpha value is 0, the superposed foreground would not be seen. If the alpha value is 1, then the background is fully covered by the foreground. The edge of each graphics primitive has its alpha value set to less than one.⁴ This has the consequence that the background will "show through" the edges of graphics primitives.

Consequently, when a original foreground image is superposed over the primitive-processed foreground image, an anti-aliasing can be applied to each graphics primitive of the primitive-processed foreground image.⁵ Such anti-aliasing can lead to an undesirable patterning within the primitive-processed foreground image.⁶ Therefore, the primitive-processed foreground image is covered over by the original foreground image, except where (as a result of the anti-aliasing processing) the primitive-processed foreground image extends

¹ See Applicants' specification at page 15, line 16, page 16, line 1, etc. "foreground."

² Idem at page 14, line 16, page 14, line 19, etc. "background."

³ Idem at page 16, lines 11-13.

⁴ Idem at page 15, lines 29-31.

⁵ Idem at page 15, lines 16-17.

⁶ Idem at page 15, lines 28-29.

beyond the original foreground image.⁷ Accordingly, the original foreground image is drawn “over” the primitive-processed foreground image, the one being superposed over the other.

Turning now to the rejections formed in the outstanding Office Action, regarding the Office Action’s assertion that the steps of Claim 1 are misdescriptive since allegedly “step (iv) occurs before step (iii) and step (v) occurs after the anti-aliasing step (iii),”⁸ Applicants respectfully disagree with such assertion, since Applicants’ Figure 10, reference numerals 1510, 1520, and at page 17, lines 1-15, supports the claimed order of the steps. In addition, even if such order were not supported by the specification, original claims form part of the original disclosure and provide their own written description. See *In re Anderson*, 471 F.2d 1237, 176 USPQ 331 (CCPA 1973). In addition, one of ordinary skill in the art of video processing, at the time the invention was made, would have been able to implement the order of the steps as recited in Claim 1. Therefore, Applicants respectfully request reconsideration of the rejection.

Applicants also note that, even if the specific order of the method steps were not covered by an embodiment of Applicants’ specification, the outstanding Office Action seems to read a specific order of steps into method claims where, as a matter of logic or grammar, the language of the method claims did not impose a specific order on the performance of the method steps, and such rejection is against established precedent, see *Altiris Inc. v. Symantec Corp.*, 318 F.3d 1363, 1371, 65 USPQ2d 1865, 1869-70 (Fed. Cir. 2003), in this case, although the specification discussed only a single embodiment, the court held that it was *improper to read a specific order of steps into method claims* where, as a matter of logic or grammar, the language of the method claims did not impose a specific order on the performance of the method steps, and the specification did not directly or implicitly require a particular order). See also *Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875,

⁷ Idem at page 15, lines 34-34, page 16, lines 3-7, page 16, line 9, page 17, lines 8, and in Figure 10, step 1530.

⁸ See the outstanding Office Action at page 5, lines 2-4

69 USPQ2d 1865, 1868 (Fed. Cir. 2004) stating that “[t]hough understanding the claim language may be aided by explanations contained in the written description, it is important not to import into a claim limitations that are not part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.”

Regarding the outstanding Office Action’s assertion that the steps of Claim 1 “do not perform the function alleged in the preamble without additional steps,”⁹ Applicants again respectfully disagree. The preamble clearly recites that the method of Claim 1 is directed to the *preparing* an anti-aliased foreground image for display over an image background. Since Applicants’ Claim 1 includes, *inter alia*, a step of applying anti-aliasing filter to generate image signals, the steps of Claim 1 clearly suffice to fulfill the function of the preamble.

In addition, regarding the assertions of the outstanding Office Action towards the previously filed remarks from page 2, line 13, to page 3, line 2, Applicants respectfully disagree with the Office Action’s sole definition of the expression “superpose.” The expression “superpose” is clearly defined by the American Heritage Dictionary (see for example in www.dictionary.com) to have two different meanings:

Superpose:

- (1) To set or place (one thing) over or above something else; and
- (2) In mathematics. To place (one geometric figure) over another so that all like parts coincide.

Since the present Application is directed to the field of image processing, for a person of ordinary skill in the art the definition (2) of the expression “superpose” is also relevant and applicable in the context of Applicants’ invention.

In addition, regarding the expression alpha-bending, a person of ordinary skill in the art knew at the time the invention was made that superposition of images can be achieved by

⁹ See the outstanding Office Action at page 5, lines 4-6.

alpha blending. Evidence is provided by the reference Broghammer et al. (U.S. Patent No. 6,714,256), stating in the discussion of the background of the invention at column 1, lines 19-28 that “[i]n addition, video signal processing systems often include a computing unit for mixing video and graphic pictures (e.g., layering and *alpha-blending*). The computing unit for mixing may weight different pictures by adjustable factors (i.e., *alpha blending*), so that transparent pictures can be displayed by *combining and superposing the images* (i.e., layering)” (emphasis added). The reference Broghammer et al. is herewith submitted for consideration by the Examiner.

In light of the above discussion, Applicants also respectfully traverse the objection to the Summary of the Invention, since it is believed that the Summary of the Invention accurately reflects the invention as recited in independent Claim 1.

Applicants also respectfully submit that Claim 16 is an apparatus claim, and that all the statements of the outstanding Office Action regarding the steps of method Claim 1 do not apply to the apparatus claim structure. Furthermore, Applicants believe that the rejections of Process Claim 17 are overcome in light of the above discussions regarding Method Claim 1.

In view of the above discussion and amendments to Claims 1 and 16-17, it is believed Claims 1 and 16-17 are definite and no further rejection on that basis is anticipated. If, however, the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work with the Examiner in a joint effort to derive mutually acceptable language.

In response to the rejection of Claim 2 under 35 U.S.C. §112, second paragraph, the term “only” is deleted from Claim 2.

In response to the rejection of Claim 8 under 35 U.S.C. §112, second paragraph, Claim 8 is amended to delete the passage regarding the “high degree of transparency,” and to further recite “said transparency coefficient for pixels near a peripheral edge of the group of

graphics primitives in said original foreground image being set so that the pixels near the peripheral edge of the group of graphics primitives are replaced by corresponding pixels of said low-pass filtered image.” These changes find-non-limiting support in Applicants’ disclosure as originally filed, for example at page 15, lines 29-32, at page 16, lines 27-35, and in corresponding Figure 9D.

In response to the rejection of Claims 9-11 under 35 U.S.C. §112, first and second paragraph, Claims 9-11 are cancelled without prejudice or disclaimer.

The present amendment is submitted in accordance with the provisions of 37 C.F.R. §1.116, which after Final Rejection permits entry of amendments placing the claims in better form for consideration on appeal. As the present amendment is believed to overcome outstanding rejections under 35 U.S.C. §112, first and second paragraphs, the present amendment places the application in better form for consideration on appeal. In addition, the present amendment is not believed to raise new issues because the changes to Claims 1-8 and 16-17 are merely of formal nature and Claims 9-11 are cancelled. It is therefore respectfully requested that 37 C.F.R. §1.116 be liberally construed, and that the present amendment be entered.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-8 and 16-17 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the below listed telephone number.

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